

Total Maximum Daily Load Information Sheet

Peruque Creek

Water Body Segments at a Glance:

Counties: Warren and St. Charles
Nearby Cities: Lake St. Louis and O'Fallon

Water Body ID: 0215 (9.6 miles)
Pollutant: Low dissolved oxygen

Source: Unknown

Water Body ID: 0216 (10.3 miles)
Pollutant: Cause unknown
Source: Lake St. Louis Dam

Water Body ID: 0217 (4.0 miles)
Water Body ID: 0218 (10.9 miles)
Pollutant: Fish Bioassessment
Nonpoint sources



Scheduled for TMDL development:

TMDL development schedules are subject to change.

The most current schedule for TMDL development is available on the department's website at dnr.mo.gov/env/wpp/tmdl/wpc-tmdl-progress.htm

Description of the Problem

A water body is considered impaired when it fails to meet applicable water quality standards. Water quality standards consist of designated uses, water quality criteria, an antidegradation policy and implementation procedures. Peruque Creek is impaired due to exceedances of state water quality criteria that protect aquatic life designated uses.

Designated uses of Peruque Creek*

- Warm Water Habitat (WWH)
- Whole Body Contact Recreation Category B (WBC-B)
- Secondary Contact Recreation (SCR)
- Human Health Protection (HHP)
- Irrigation (IRR)
- Livestock and Wildlife Protection (LWP)

^{*} In addition to these specific uses, all waters of the state are protected by the general water quality criteria that are specified in the state's Water Quality Standards at 10 CSR 20-7.031(4).

Designated Uses that are Impaired

- Warm Water Habitat (WWH)
- General Criteria

Criteria and Water Quality Data

- Water body 215 of Peruque Creek is impaired by low dissolved oxygen. The water quality criterion
 for dissolved oxygen at 10 CSR 20-7.031 Table A is a minimum 5 mg/L. A water is judged to be
 impaired for low dissolved oxygen if more than 10 percent of available measurements fall below this
 criterion. For water body 215, 18 of 103 samples, or 17.5 percent, failed to meet the dissolved
 oxygen criterion.
- Water body 216 of Peruque Creek is impaired by an unknown pollutant. The general water quality criteria at 10 CSR 20-7.031(4)(D) states that waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal, or aquatic life. Likewise, 10 CSR 20-7.031(4)(G) states that waters shall be free from physical, chemical, or hydrologic changes that would impair the natural biological community. Fish kills occurred in this section of Peruque Creek in August and October 2010. A water body is deemed impaired if there is more than one acute toxicity event in the last three years for which data is available.
- Water bodies 217 and 218 of Peruque Creek are listed as impaired due to data from fish bioassessments showing less diversity than what is observed in similar sized streams. In previous 303(d) lists, this impairment was attributed to sedimentation. Protections for aquatic life from excess sedimentation are provided in the general criteria at 10 CSR 20-7.031(4)(A) that state, waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly, or harmful bottom deposits or prevent full maintenance of beneficial uses. Likewise, the language previously provided for 10 CSR 20-7.031(4)(G) also provides protections from excess sedimentation.

TMDL for Perugue Creek

TMDLs for Peruque Creek will calculate the maximum amount of a pollutant that the stream can receive and still meet water quality standards. The TMDL will also identify all potential or suspected pollutant sources in the watershed and distribute the allowable pollutant loads among those various sources. When developed, the Peruque Creek TMDLs will use the most current and available data. For this reason, final TMDLs may present information that differs from that contained in this information sheet.

For more information call or write:

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Program Home Page: dnr.mo.gov/env/wpp/index.html

Map Showing the Peruque Creek Watershed

